Championing Best Practices in Maternal Health

An advanced level of obstetrics and gynecology care is available to women living in Westchester and surrounding communities at NewYork-Presbyterian Lawrence Hospital, where Anna Burgansky, MD, Director of Obstetrics and Gynecology, is leading patient safety and quality care initiatives. The hospital has recently become the seventh campus of NewYork-Presbyterian.

“When I came on board in 2015, my vision was to make Lawrence Hospital into a star in clinical practice, quality, and patient safety and to be able to offer local community access to care that is equivalent to an academic medical center,” says Dr. Burgansky.

“As a first step to achieve this, we’ve added maternal-fetal medicine specialists and a new group of general obstetricians and gynecologists from NewYork-Presbyterian/Columbia University Irving Medical Center to complement existing medical staff. The hospital now has a growing obstetrical hospitalist program to ensure consistent availability of an obstetric provider who is able to respond to clinical emergencies on site 24 hours a day. We’ve also brought together a multidisciplinary team, including obstetricians, maternal-fetal medicine specialists, anesthesiologists, neonatologists, and nursing staff and undertaken a complete update of current clinical guidelines and common practices in our department.”

Throughout her career, Dr. Burgansky has helped to develop guidelines for perinatal care and obstetric complications and protocols for the management of obesity in pregnancy, along with serving on patient safety committees and participating in hospital-wide safety initiatives. A longtime champion of best (continued on page 2)

Emphasizing Experiential Learning in Medical Education

Faculty at Weill Cornell Medicine are applying an approach in medical education that puts theory into practice with increased faculty supervision. Shari E. Gelber, MD, PhD, an obstetrician/gynecologist and a specialist in maternal-fetal medicine at NewYork-Presbyterian/Weill Cornell Medical Center, and Assistant Professor, Obstetrics and Gynecology at Weill Cornell Medicine, is spearheading educational initiatives for medical students and residents to provide more direct learning opportunities, encourage self-directed learning, and teach effective counseling skills so that they can empower patients to make decisions about their own health care.

In August 2014, Weill Cornell Medicine launched a new curriculum that teaches the core concepts of three fundamental themes required for the practice of medicine: basic science principles, the clinical skills involved in patient care, and “physicianship,” a skill set that includes professionalism, communication, medical ethics, and humanism.

“Our medical school curriculum is very practical, in which students learn from what we encounter in clinic that day,” says Dr. Gelber, whose educational responsibilities include teaching the Essential Principles of Medicine, conducting a roundtable discussion in medical ethics, and serving as Clerkship Director for the Department of Obstetrics and Gynecology. “Medical students have just finished a period in which all of their teaching is didactic, (continued on page 3)
Championing Best Practices in Maternal Health (continued from page 1)

practices in maternal patient safety and quality care, she also has played an active role in the American Congress of Obstetricians and Gynecologists (ACOG) District II Safe Motherhood Initiative (SMI).

SMI is an innovative program that aims to decrease the incidence of preventable obstetrical complications and maternal deaths in hospitals across New York State through the implementation of bundles – standardized clinical protocols that address the three leading causes of maternal death: severe hypertension, obstetric hemorrhage, and venous thromboembolism.

“We believe the SMI guidelines have been effective in addressing the maternal mortality rate in New York State,” says Dr. Burgansky. “When the SMI began in 2013, New York’s ranking was 48 out of 50 states in maternal mortality. Since then the rate has dropped and New York is now ranked at 30, with a call for action by women’s reproductive health advocates to further reduce the state’s maternal mortality rate, particularly among black women.”

Dr. Burgansky’s first priority at NewYork-Presbyterian Lawrence Hospital was to implement new and updated quality and safety guidelines. “We became a participating hospital in the SMI and began adopting the three bundles,” says Dr. Burgansky. “An important part of the implementation process was hands-on simulation training and education of nursing and physician staff aimed to improve our team’s preparedness and responses to common obstetrical emergencies. We review our progress on a monthly basis and perform audits to assess adherence to the guidelines in clinical practice. Every member of our multidisciplinary team continues to be involved in refining our safety protocols and clinical practices. This process brings the team together as each member shares his or her own experience and expertise to achieve consensus on how we can provide the best care to our patients.”

Obesity and Pregnancy The obstetrics team has also established interventions to manage the risks associated with obesity during pregnancy, which has deleterious consequences for mother and child. “We are seeing rising rates of obesity in our patients,” says Dr. Burgansky. “One of our newer projects is counseling our patients and educating our providers about obesity as a major risk factor for complications in pregnancy. We have also adopted practice guidelines for these patients, including diabetes screenings early in pregnancy, comprehensive testing of the fetus, evaluations by anesthesiologists for additional input regarding care during labor and delivery, and the administration of prophylaxis against thrombosis.”

“We have come a long way in educating our physicians about the risk of maternal obesity, and we are doing everything we can to bring this message to our patients, who vary widely in terms of education, socioeconomic status, and the resources available to them in their community,” adds Dr. Burgansky.

Pain Management The safe and effective management of pain is another goal for Dr. Burgansky and her team. “We are trying to reduce the need for pharmacologic agents for our obstetrical patients through a multimodal pain management approach that includes a combination of non-opioid medications such as acetaminophen and ibuprofen, regional anesthesia and nerve blocks, and alternative medicine therapies,” says Dr. Burgansky. “Our nurses are trained in meditation, aromatherapy, and Reiki to reduce pain and improve our patients’ overall labor and delivery experience.”

Cesarean Delivery Rates One of the team’s key initiatives is to reduce the rate of preventable cesarean deliveries.

“NewYork-Presbyterian Lawrence Hospital had one of the highest cesarean delivery rates in the state,” says Dr. Burgansky. “The high rate of cesarean deliveries was due to multiple factors, including our patient population, physician practice styles, availability of an obstetric hospitalist, management of labor progress and inductions of labor.”

To bring about change, we examined and revised our labor management protocols based on the latest national guidelines, added additional pharmacologic and mechanical agents to enhance induction success, and standardized the administration of Pitocin to prevent uterine overstimulation,” explains Dr. Burgansky. “We also shared regular feedback about individual physicians’ cesarean and induction statistics and how they compare to their peers. We continue to review and share our overall progress with the staff on a monthly basis. Emphasis was placed on reducing the patient’s first cesarean delivery, because it is the first cesarean delivery that drives future ones. These tactics have been very successful: The total cesarean delivery rate at Lawrence Hospital has declined from 53 percent in 2013 to 40 percent in 2017.”

Providing the highest quality and safest care for mothers and their infants remains the top priority for Dr. Burgansky and her team. “Our efforts in this area are further supported by access, when necessary, to the most advanced, specialized care that is available at NewYork-Presbyterian/Columbia.” This includes Columbia’s new Mothers Center, which manages complex pregnancies where the mother has surgical or medical complications; the Carmen and John Thain Center for Prenatal Pediatrics at NewYork-Presbyterian Morgan Stanley Children’s Hospital, which provides comprehensive advanced care for pregnancies with fetal complications; as well as the Center for Prevention of Preterm Birth that offers care and interventions for pregnancies at risk for premature delivery.

“As obstetricians in our routine encounters with patients, we are responsible for the lives of two patients – the mother and her unborn child,” says Dr. Burgansky. “Through formalized programs, such as the Safe Motherhood Initiative, we in the field are finding that maternal and fetal outcomes are best served through an organized culture of obstetric safety that optimizes delivery of care.”

Reference Article

For More Information
Dr. Anna Burgansky • ab2346@columbia.edu
so this process teaches them how to learn by watching and doing. Our goal is to prepare them with the critical communication skills they need to function as physicians."

The field of obstetrics and gynecology, in particular, notes Dr. Gelber, requires physicians to have strong communication skills due to the sensitive nature of taking a medical history and discussing delicate subjects, such as sexually transmitted diseases, unplanned pregnancies, sexual behaviors, and incontinence. The observed physician encounter clerkship enables medical students to interview and examine a patient while a faculty member is present to offer support, serve as a role model, and provide instant feedback. "This is very different than the earlier method of having the student talk to the patient on their own and later present their interaction to an attending," says Dr. Gelber.

Weill Cornell medical students are introduced to clinical experiences early in their studies. Beginning in their first year, the LEAP (Longitudinal Educational Experience Advancing Patient Partnerships) program provides an opportunity for students to follow patients with chronic illnesses over the length of their training under the guidance of faculty mentors with whom they discuss the clinical and psychosocial dimensions of patient care.

"The best part of my medical education is being able to spend a lot of time with patients," says Rana Khan, who just finished her second year as a medical student. "I began seeing patients on day one of my first year, and within a few months I was taking the medical history and performing the physical exam. These experiences give me a sense of what it’s like to be a doctor, and I feel like I'm not learning in a bubble – it’s real."

Ms. Khan is also participating in Pregnancy Partners, in which she follows a single patient throughout her pregnancy, labor, and delivery. "Through all of my supervised patient encounters I’m learning how to talk to patients professionally and respectfully," says Ms. Khan. "Hands-on learning allows me to see what the experiences and processes are like for the patient. So often we don’t get to see how the medical system impacts the patient."

The curriculum also includes a scholarly research project in a selected area of concentration. "The students conduct the project under the guidance of a mentor," says Dr. Gelber, "giving them the chance to spend more time working one-on-one with a faculty member."

Last summer, Ms. Khan collaborated with Dr. Gelber in the Atkins Curriculum Scholarship program, a summer research fellowship focused on research surrounding cardiometabolic risk. "Dr. Gelber has great ideas and is so enthusiastic about research, and she takes the time to explain the smallest details," says Ms. Khan. This summer, Dr. Gelber is working with medical students Rohini Kopparam, who has a grant to study preeclampsia, and Rachel Friedlander, who is pursuing two projects – the first on metabolic rate and the gut microbiome in relation to gestational diabetes and a second project on the use of cast iron pots to help treat iron deficiency anemia in pregnancy.

"Our new model for clinical learning encourages students to analyze clinical problems rigorously, discuss the interpretation with our physicians, and then implement the clinical plan," says Dr. Gelber. "Through this approach, the student is encouraged to develop independent clinical skills, while safeguarding the highest level of patient care."

For More Information
Dr. Shari E. Gelber • shg7001@med.cornell.edu

The Mothers Center: Multidisciplinary Care for Women with Maternal Risk

In May 2018, NewYork-Presbyterian and Columbia University Irving Medical Center opened the Mothers Center, a new space that enables clinicians to provide comprehensive, multidisciplinary care before, during, and after a high-risk pregnancy. The first program of its kind in the country to focus on moms at risk for complications, the Mothers Center consolidates all relevant specialists in the same location, where they can collaborate on an individual patient’s care. The 5,300-square-foot outpatient center, located at NewYork-Presbyterian Morgan Stanley Children’s Hospital, houses five exam rooms, three consult rooms, two ultrasound rooms, two non-stress-test rooms, and meeting spaces that foster communication and care among providers.

“Mothers are often the heart and anchor of a family; if mom is sick or absent, the whole family suffers. Our job is to optimize the health of mom to the best of our ability, so that she can be healthy for her family and for herself,” says Mary E. D’Alton, MD, Director of Services at NewYork-Presbyterian Sloane Hospital for Women and Chair of the Department of Obstetrics and Gynecology at Columbia University Irving Medical Center.

The Mothers Center comes at a time when the high rate of maternal deaths and “near misses” in the United States has drawn attention as a major public health concern. The rate of severe complications around childbirth has steadily increased in recent years and affects more than 50,000 women every year, according to the U.S. Centers for Disease Control and Prevention. An estimated half of all maternal deaths in the U.S. is preventable. (continued on page 4)
The Mothers Center: Multidisciplinary Care for Women with Maternal Risk (continued from page 3)

At the Mothers Center, patients with acute or chronic medical and surgical complications meet with maternal-fetal medicine experts, as well as specialists in cardiology, neurology, surgery, and endocrinology, working as a team to develop customized treatment plans that meet each patient’s unique needs and maximize the safety of both mother and baby. The Mothers Center treats women with a wide range of serious complications and risk factors, such as lung and heart transplants, hypertension, seizure disorders, and placenta accreta. The highest proportion of the Mothers Center’s patients have cardiac conditions.

“Increasingly, women who are considering pregnancy or are already pregnant have significant complexities that require seamless collaboration,” says Leslie Moroz, MD, Director of the Mothers Center. “The reasons for this include delayed childbearing, assisted reproductive technologies, and effective management of conditions that in the past would have made pregnancy ill-advised or not possible.”

Construction of the Mothers Center was made possible by a generous gift from Carmen and John Thain in memory of Carmen’s mother, Angeles Badell, MD, who was a leader in the study of pediatric rehabilitation medicine. An expert in the treatment of spina bifida, Dr. Badell was dedicated to the well-being of mothers and their families.

“I am grateful to Carmen and John Thain, NewYork-Presbyterian, and Columbia University Irving Medical Center for their focus on maternal health and the opportunity to introduce a model of maternal care that we hope will reduce the high rates of maternal mortality and morbidity in New York and across the country,” adds Dr. D’Alton.

For More Information
Dr. Mary E. D’Alton • md511@cumc.columbia.edu
Dr. Leslie Moroz • lm3000@cumc.columbia.edu